

## ABSTRACT

In one embodiment a system and method is arranged for bridging the dead-band when asynchronous signals are compared against each other. There is developed a pair of phase related signals from one of the signals, each phase related signal phase shifted from each other, but having the same frequency as the signal from which it was derived. The other frequency signal is compared against each of the phase-related developed signals to generate an error signal which quadrature rotates when the first and second signals are out of frequency with each other. A control signal is generated when the quadrature rotation is outside a certain limit. The error signal is controllably buffered to insure that the error signal only occurs when the frequencies are offset for a selected period of time.